



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,534	02/23/2004	Tetsuya Hayashi	04101/LH	1553
1933 7590 02/20/2008 FRISHAUF, HOLTZ, GOODMAN & CHICK, PC 220 Fifth Avenue 16TH Floor NEW YORK, NY 10001-7708			EXAMINER NEGRON, WANDA M	
			ART UNIT 2622	PAPER NUMBER
			MAIL DATE 02/20/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/785,534

Applicant(s)

HAYASHI ET AL.

Examiner

Wanda M. Negrón

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/15/2008 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11, 14, 16-18, 22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Suemoto et al. (US Application Publication No. 2001/0009443 A1), hereinafter referred to as Suemoto.

Regarding **claim 11**, Suemoto discloses a camera device (see figures 1A-1B) comprising a movable optical system (see figures 3-5); a driving unit (24) configured to drive the movable optical system (see figure 7A); and a control unit (22) configured to control the driving unit (see paragraph [0053]); wherein the driving unit is configured to

start driving of the movable optical system from a housed state to a protruding state in response to an instruction from the control unit (see paragraph [0054]); and wherein the control unit is configured to perform a first initialization which is necessary to drive the movable optical system from the housed state (see paragraphs [0066] and [0067]), start the driving of the movable optical system from the housed state, i.e. start moving the zoom lens groups to their home positions (see paragraph [0068] and figures 9A-9B), and then start performing of a second initialization, i.e. "initialization of devices necessary other than the lens group such as photographing device, an image storage device and the like" (see paragraph [0083], lines 1-11), before the movable optical system reaches the protruding state, i.e. before the zoom lens groups reach their home positions (see figures 9A-9B), the second initialization being unnecessary to drive the movable optical system from the housed state.

Regarding **claim 14**, Suemoto discloses a memory (RAM 22b) configured to store a first program for driving the movable optical system and a second program for controlling the camera device to operations other than the driving of the movable optical system (see paragraphs [0052] and [0066]). It would be inherent that the first initialization comprises loading of the first program and the second initialization comprises loading of the second program since said programs are required to perform said camera operations.

Regarding **claim 16**, Suemoto discloses that the driving unit drives a zoom lens included in the movable optical system (see paragraphs [0053]-[0054]).

Regarding **claim 17**, Suemoto discloses that the driving unit opens a mechanical shutter included in the movable optical system (see paragraph [0067] and figures 8A and 9A).

Regarding **claim 18**, Suemoto discloses that the control unit controls the driving unit to open the mechanical shutter before driving the zoom lens (see paragraph [0067] and figures 8A and 9A-9B).

Method claim 22 is drawn to the method of using the corresponding apparatus claimed in claim 11. Therefore method claim 22 corresponds to apparatus claim 11 and is rejected for the same reasons of obviousness as used above.

Claim 23 is drawn to a computer program stored in a computer readable medium corresponding to the method claimed in claim 22. Therefore claim 23 corresponds to method claim 22 and is rejected for the same reasons of obviousness as used above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suemoto.

Regarding **claim 12**, as mentioned in the discussion of claim 11 above, Suemoto discloses all the limitations of the parent claim. Suemoto, however, does not explicitly disclose that the control unit performs an interrupt processing during the second initialization to determine whether the movable optical system has been driven to the protruding state, and the control unit stops the driving of the movable optical system by the driving unit when it is determined that the movable optical system has been driven to the protruding state.

Official notice is taken that the concept of using an interrupt routine while performing a camera initialization is well known in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to check if the zoom lens taught by Suemoto reached a home position by using an interrupt while other initialization processes are being performed because the DC motor driving the lens can be stopped as soon as a home position is reached without having to wait for other processes to finish.

Regarding **claim 13**, as mentioned in the discussion of claim 11 above, Suemoto discloses all the limitations of the parent claim. Suemoto also teaches that the control unit starts driving the movable optical system before performing the second initialization when an operation mode for photographing is set (see step 204 in figure 8A). Suemoto, however, does not explicitly teach that the control unit starts performing the second initialization without driving the movable optical system when the operation mode for photographing is not set.

Official notice is taken that driving the optical system of a camera device consumes power. It would have been obvious to one having ordinary skill in the art at the time the invention was made to disable the driving of the optical system when not in a photographing mode in order to minimize unnecessary power consumption.

Regarding **claim 15**, as mentioned in the discussion of claims 11 and 14 above, Suemoto discloses all the limitations of the parent claim. Official notice is taken that it is old and well known to store programs in a memory either continuously or non-continuously. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to continuously store programs in a memory since a person with ordinary skill has good reason to pursue the known options within his or her technical grasp if this leads to an anticipated result.

Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suemoto as applied to claims 11, 16-18 and 22-23 above, and further in view of Ishiguro et al. (US Patent No. 6,341,201 B1), hereinafter referred to as Ishiguro.

Regarding **claim 19**, as mentioned in the discussion of claim 11 above, Suemoto discloses all the limitations of the parent claim. Suemoto, however, does not explicitly disclose that the control unit checks a battery level of the camera device before driving the zoom lens, and that the control unit starts performing the second initialization without driving the movable optical system when the battery level of the camera device is lower than a predetermined level.

The concept of checking the power level of a camera battery before performing operations which consume a large amount of power, e.g. operating the motors for driving the optical system or the flash device, is well known in the art, as evidenced by Ishiguro (see col. 29, lines 18-24). It would have been obvious to one having ordinary skill in the art at the time the invention was made to check the battery level of the camera taught by Suemoto and disabling driving of the optical system to an initial position while performing other low-power initializations because it would prevent damaging the lens when the barrel cannot be retracted after initialization due to a lack of the necessary power, while other camera operations would still be available to the user.

Regarding **claim 20**, as mentioned in the discussion of claim 11 above, Suemoto discloses all the limitations of the parent claim. In addition, Suemoto discloses that the

control unit powers on a battery of the camera device (see paragraph [0086]).

Suemoto, however, does not explicitly disclose that the control unit performs the first initialization after the battery level reaches a predetermined level.

The concept of checking the power level of a camera battery before performing operations which consume a large amount of power, e.g. operating the motors for driving the optical system or the flash device, is well known in the art, as evidenced by Ishiguro (see col. 29, lines 18-24). It would have been obvious to one having ordinary skill in the art at the time the invention was made to check the battery level of the camera taught by Suemoto before driving the optical system to an initial position because it would prevent damaging the lens when the barrel cannot be retracted after initialization due to a lack of power.

Regarding **claim 21**, Suemoto as modified by Ishiguro does not teach that the control unit reads information relating to the movable optical system that is necessary for the first initialization before the battery level reaches the predetermined level.

Official notice is taken that that the control unit can read information relating to the movable optical system that is necessary for the first initialization before or after a battery level check is performed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to read information relating to the movable optical system that is necessary for the first initialization before a battery level check is performed since a person with ordinary skill has good reason to pursue the known options within his or her technical grasp if this leads to an anticipated result.

Response to Arguments

Applicant's arguments filed on 1/15/2008 have been fully considered but they are not persuasive.

Applicant asserts on page 11 that the reference to Suemoto does not teach "starting performing of a second initialization before the movable optical system reaches the protruding state, wherein the second initialization is unnecessary to drive the movable optical system from the housed state". The examiner respectfully disagrees.

Suemoto discloses an embodiment wherein after the focus lens reaches its initial position, "initialization of devices necessary for photographing other than the lens groups such as a photographing device, an image storage device and the like is completed" (see paragraph [0083], lines 1-7). However, Suemoto also explains that, in another embodiment, "[e]ven if the movement of the focus lens is not complete", as soon as initialization of other devices is completed, the digital camera is able to take a picture (see paragraph [0083], lines 8-11). Therefore, Suemoto teaches starting a second initialization, i.e. initializing a photographing device and an image storage device, before the movable optical system reaches the protruding state, i.e. before the lens reaches its home position, wherein the second initialization is unnecessary to drive the movable optical system from the housed state.

For the foregoing reasons, the rejection is still deemed proper and has been maintained.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Hamada et al. (US Patent No. 5,819,120) discloses a variable focus lens device in a camera wherein an initial position is set when a power switch is turned on.
- Hirasawa (US Patent No. 5,424,776) discloses a lens control device for performing focusing during lens initialization.
- Okada et al. (US Patent No. 7,129,984 B1) discloses a control method for a digital camera wherein the mechanical driving member is driven in parallel to start of an OS by the system controller.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda M. Negrón whose telephone number is (571) 270-1129. The examiner can normally be reached on Mon-Fri 6:30 am - 4:00 pm alternate Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Application/Control Number:
10/785,534
Art Unit: 2622

Page 11

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wanda M. Negrón/

Examiner, Art Unit 2622
February 12, 2008


DAVID OMETZ
SUPERVISORY PATENT EXAMINER